REMARKS

This responds to the Office Action mailed on November 8, 2005, and the references cited therewith.

Claims 1, 11 and 20 are amended; as a result, all originally filed claims remain pending in this application.

Claim 1 has been amended to specify that "at least one EL lighting surface is oriented to the front of the vehicle and at least one EL lighting surface is oriented to the rear of the vehicle so it is visible to drivers approaching a front of the vehicle and to drivers approaching a rear of the vehicle, and further wherein at least one of the EL lighting surfaces is approximately 72 inches in width and at least about 8.5 inches in height."

Claim 11 has been amended to move certain limitations from the preamble to the body of the claim, and to specify that "at least one EL lighting surface is oriented to the front of the vehicle and at least one EL lighting surface is oriented to the rear of the vehicle so it is visible to drivers approaching a front of the vehicle and to drivers approaching a rear of the vehicle, and further wherein at least one of the EL lighting surfaces is approximately 72 inches in width and at least about 8.5 inches in height."

Claim 20 has been amended to specify that "at least one EL lighting device is oriented to the front of the vehicle and at least one EL lighting device is oriented to the rear of the vehicle so it is visible to drivers approaching a front of the vehicle and to drivers approaching a rear of the vehicle, and further wherein at least one of the EL lighting devices has an electroluminescent surface approximately 72 inches in width and at least about 8.5 inches in height."

These amendments are for the purpose of more clearly highlighting the advantageous features and non-obvious advances of the claimed invention over the cited prior art. More specifically, the claims now all include the limitation that the oversized vehicle or the vehicle with the oversized load includes at least one EL lighting surface (claims 1 and 11) or device (claim 20) oriented to the front and least one to the rear of the vehicle, to be visible to both oncoming traffic and to traffic following the vehicle. In addition, the claims now include the limitation that there is at least one electroluminescent surface approximately 72 inches in width and at least about 8.5 inches in height.

These limitations highlight the advantageous features of the claimed invention to protect other drivers and vehicles from oversized vehicles or loads moving through public roadways. Because the claimed EL lighting on the oversized vehicle or oversized load generates light from a relatively large area, the light provided is not a point source, but is an area source. This area source reduces or eliminates night blinding, and flicker produced by point sources such as incandescent lights, and LEDs. Further, it is believed that the area source of EL lighting can be seen from farther away, and through difficult conditions such as snow, dust, fog, etc. This is due to EL lighting providing numerous sources (an area of sources) of light to compensate for scattering and dispersal of light from any one individual source in the EL surface. Further, due to the nature of EL lighting, this relatively large area of EL illumination may be powered with relatively less power than would be required for conventional lighting technology. Further, the EL lighting surfaces enumerated in the claimed invention uses produce low heat compared to conventional lighting technology. Of additional importance is that the EL lighting surfaces may be more robust than conventional lighting technology, and not prone to catastrophic failure. For example, when constructed with numerous phosphor portions, it is difficult to damage all phosphor portions during an event such as a rock hitting a sign – thus a partial loss of illuminated surface does not cause catastrophic failure. Further, EL lighting does not burn out catastrophically as incandescent light bulbs do.

The advantageous features of the claimed invention may be contrasted with some existing configurations of signs that are self lit, such as by incandescent bulbs. These configurations may have a number of disadvantages, such as requiring large amounts of power to operate, or producing large amounts of unwanted heat. In an application involving snow, in particular, heat can be detrimental by melting snow to water, which may cause electrical failure and/or icing problems. Existing lit configurations of signs other than EL, also suffer from negative effects of point source lighting. Point sources, such as incandescent bulbs or light emitting diodes (LEDs) provide an intense source of light from a single point. Point sources can cause night blindness after a viewer looks away from the point source light. Also, point source lights appear to flicker and move around when viewed. This is due to their single source beams being distorted by elements such as dust particles, snow flakes, or other elements of the atmosphere between the point source and the viewer. Point source lights also have a limited viewable distance, or

penetration through snow, fog, etc. due to similar scattering and distortion of the single source beam.

§102 Rejection of the Claims

Claim 6 was rejected under 35 U.S.C. § 102(b) for anticipation by Wiley (U.S. 4,087,124). The claims as amended clearly distinguish over Wiley. In particular, Wiley does not teach use of EL lighting surfaces on an oversized vehicle or oversized load. Instead, Wiley seems to be focused on providing signage on a wind deflecting panel, which by its very nature must be oriented forward. As such, Wiley does not recognize nor teach use of an EL lighting surface oriented toward the rear of an oversized vehicle or an oversized load, so as to warn drivers approaching from the rear. Further, Wiley appears to have little or no appreciation for the various advantageous features of EL lit surfaces for the purpose of illuminating oversized vehicles or loads with a safety indicia. For instance, Wiley does not discuss safety concerns nor mention the advantages of low power, area source lighting, or being resistant to catastrophic failure due to burn out or damage. As such, Wiley does not provide any teaching that would motivate one of ordinary skill in the art to apply EL lighting as taught only by the Applicants.

§103 Rejection of the Claims

Claims 1, 3, 4, 7, 8, 20, 22, 23, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson (WO 98/57097).

The claims as amended clearly distinguish over Stevenson. In particular, Stevenson does not teach use of EL lighting surfaces on an oversized vehicle or oversized load. Instead, Stevenson seems to be focused on providing an efficient or lower cost EL lighting system for general use with vehicles. Further, Stevenson does not recognize nor teach use of an EL lighting surface oriented toward both the front and the rear of an oversized vehicle or an oversized load, so as to warn drivers approaching from the rear. Further, Stevenson appears to have little or no appreciation for the various advantageous features of EL lit surfaces for the purpose of illuminating oversized vehicles or loads with a safety indicia. For instance, Stevenson does not indicate any appreciation that EL lighting has the advantages over conventional point source lighting that would be required to motivate one of ordinary skill in the art to produce the claimed

invention. In particular, Stevenson does not mention the advantages of low power, area source lighting as opposed to point source lighting, or being resistant to catastrophic failure due to burn out or damage.

Claim 2, according to claim 1, claim 5, according to claim 1, independent claim 11, claim 14, according to claim 11, claim 15, according to claim eleven, claim 16, according to claim 11, claim 17, according to claim 11, claim 19, according to claim 11, claim 24, according to claim 20, and claim 25 according to claim 1, were all rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson (WO 98/57097) in view of Fernandez (U.S. 5,434,013).

The combination of the teachings of Stevenson and Fernandez does not improve the effectiveness of the 103 rejection. Fernandez also fails to enumerate or appreciate the various advantageous aspects of EL lighting that make it desirable to use for a safety sign application requiring a relatively large surface area. Moreover, it would appear that the combination of the teachings of Stevenson and Fernandez would lead one of ordinary skill not to the claimed invention, but to the use of Stevenson's EL lighting system for the purposes enumerated by Fernandez, which do not include purposes on slow moving vehicles or relatively large area signs.

Claim 9, according to claim 1, and claim 10, according to claim 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson (WO 98/57097) in view of Saminski, et al. (U.S. 2002/0181226).

Again, Saminski, et al., does not provide the teaching required to provide the motivation to provide the claimed invention. In particularly, Saminski, et al., teaches a very small EL lighting source of about 18 millimeters wide, or less than one inch, and about 160 millimeters long, or about 7 inches. As such, it does not suggest use of a relatively large area source EL lighting surface to use on oversized vehicles or oversized loads, and accordingly cannot supply the teaching of motivation missing from Stevenson. Further, again, combining Saminski, et al., with Stevenson, may give a blinking EL light, but it would not result in the claimed invention.

Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson (WO 98/57097) in view of Fernandez (U.S. 5,434,013) as applied to claim 11, and further in view of Saminski (U.S. 2002/0181226).

As set forth above, none of Stevenson, Fernandez nor Saminski, et al., provide the motivation to use a relatively large area source EL light for oversized vehicles or oversized

loads. Stevenson and Fernandez appear to be primarily motivated by the decorative aspects of EL, and not by its advantageous properties for safety applications. The teaching of Saminski, et al., does not address large area source lighting applications for EL at all.

Claims 13 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson (WO 98/57097) in view of Fernandez (U.S. 5,434,013) as applied to claim 11, and further in view of Chien (U.S. 5,775,016).

As set forth above, neither Stevenson nor Fernandez provide the motivation to use a relatively large area source EL light for oversized vehicles or oversized loads. Also as previously noted, Stevenson and Fernandez appear to be primarily motivated by the decorative aspects of EL, and not by its advantageous properties for safety applications as taken advantage of at least in part by the claimed invention. The teaching of Chien also does not address relatively large area source lighting applications for EL in a safety setting, and certainly does not teach anything about the use of such lighting for oversized vehicles or oversized loads. Thus, the combination of the teachings of these references would in no way motivate one of ordinary skill in the art to provide the claimed invention.

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Stevenson (WO 98/57097) in view of Fernandez (U.S. 5,434,013) as applied to claim 11, and further in view of Kalana (U.S. 6,604,834).

As set forth above, neither Stevenson nor Fernandez provide the motivation to use a relatively large area source EL light for oversized vehicles or oversized loads. Also as previously noted, Stevenson and Fernandez appear to be primarily motivated by the decorative aspects of EL, and not by its advantageous properties for safety applications as taken advantage of at least in part by the claimed invention. The teaching of Kalana also does not address relatively large area source lighting applications for EL in a safety setting, and certainly does not teach anything about the use of such lighting for oversized vehicles or oversized loads. One of the central purposes of Kalana seems to be illuminating foot/step placement surfaces such as running boards or bumpers that may be stepped on. The central purpose does not appear to involve improving the visibility of a vehicle for the protection of others that may collide with that vehicle accidentally. Thus, the combination of the teachings of these references would in no way motivate one of ordinary skill in the art to provide the claimed invention.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6902 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

AARON GOLLE ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6902

Date 3/8/2006

By _____
Steven W. Lundberg
Reg. No. 30,568

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8 day of March, 2006.

STACEY LUTOSKE
Name

Signature